

BIOLOGICAL OPINION SUMMARY  
Kitchen Overlook

**Date of opinion:** June 11, 1997

**Action agency:** U.S. Forest Service, Coronado National Forest, Safford Ranger District

**Project:** Construction of restroom facilities, a parking lot, and a scenic overlook.

**Location:** Graham County, Arizona

**Listed species affected:** Mexican spotted owl (*Strix occidentalis lucida*) - threatened.

**Biological Opinion:** Non-jeopardy.

**Reasonable and prudent measures:** *Implementation of these measures through the terms and conditions is mandatory.* One reasonable and prudent measure was provided, as follows: If possible, minimize effects of noise disturbance to the Mexican spotted owl.

**Terms and conditions:** *Terms and conditions implement reasonable and prudent measures and are mandatory requirements.* One reasonable and prudent measure was provided, as follows: If possible, complete construction activities outside of the breeding season for the Mexican spotted owl (March 1 to August 31).

**Conservation recommendations:** *Implementation of conservation recommendations is discretionary.* Three conservation recommendations were provided, as follows: (1) Select an alternative site for placement of the scenic overlook, restroom facilities, and bathroom outside of an existing PAC; (2) Enhance survey efforts to determine nest/roost sites used by Mexican spotted owls in known PACs on the Coronado National Forest to increase the Forest Service's ability to avoid adverse effects to the owl in future project planning; and (3) Take an active role in developing a conservation strategy to avoid or minimize adverse effects of recreation and other projects to Protected Activity Centers in the future.



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In Reply Refer To:

AESO/SE  
2-21-97-F-167

June 11, 1997

Mr. George Asmus  
District Ranger  
Safford Ranger District  
Coronado National Forest  
P.O. Box 709  
Safford, Arizona 85548-0709

Dear Mr. Asmus:

The U.S. Fish and Wildlife Service has reviewed the Biological Assessment and Evaluation for the Kitchen Overlook located in Graham County, Arizona. Your January 21, 1997, request for formal consultation was received on January 27, 1997. This document represents the Service's biological opinion on the effects of that action on the Mexican spotted owl (*Strix occidentalis lucida*) in accordance with section 7 of the Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.).

This biological opinion is based on information provided in the January 21, 1997, Biological Assessment and Evaluation (BAE). Literature cited in this biological opinion is not a complete bibliography of all literature available on the Mexican spotted owl (spotted owl), construction activities and their effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file in this office.

The Service has determined that the action, as proposed in the BAE, will not jeopardize the continued existence of the spotted owl. The Forest Service additionally provided effects determinations for critical habitat for the spotted owl. Since critical habitat for the spotted owl has been enjoined by New Mexico District Court (Coalition of Arizona-New Mexico Counties for Stable Economic Growth versus USFWS, No. 95-1285-M Civil (D.N.M., filed March 4, 1977)), no conferencing or consultation is required for critical habitat for this species. The Forest Service has also determined that the proposed project will not affect the Mt. Graham red squirrel (*Tamiasciurus hudsonicus grahamensis*). No concurrence is required from the Service for no affect determinations; therefore, the Service has not reviewed this project for effects to the Mt. Graham red squirrel.

The BAE received from the Forest Service requested formal consultation on four alternatives. The Service generally recommends that a final project alternative be selected prior to requesting consultation. However, we have provided consultation on each of the alternatives discussed

within the BAE. Because formal consultation was requested, and because the Service does not concur with an affect determination of may affect, not likely to adversely affect for Alternatives 1, 2, and 4, we have provided a biological opinion covering all four alternatives.

## CONSULTATION HISTORY

The BAE for the proposed project is dated January 21, 1997, and was received in this office on January 27, 1997. One subsequent telephone conversation took place between Forest Service and Service staff on May 28, 1997. During this telephone call, the Forest Service clarified that all attempts would be made to complete construction outside of the breeding season for the spotted owl, but that funding constraints may limit flexibility in scheduling.

## BIOLOGICAL OPINION

### DESCRIPTION OF PROPOSED ACTION

The proposed action is located at Township 9 South, Range 24 East, sections 23 and 24 in the Pinaleno Mountains, Graham County, Arizona. The Forest Service has proposed four alternatives for the project, with the first three alternatives using an existing primitive pullout and camping area located at Hagens Point. The fourth alternative would use an existing parking area located at the Shake Trail Head. Depending on the alternative selected, the proposed project would be constructed at either 8,800 feet or 8,900 feet. The BAE describes vegetation in the project area as dominated by ponderosa pine (*Pinus ponderosa*) and Gambel oak (*Quercus gambelii*).

The project would involve construction of a scenic overlook on Swift Trail (State Route 366) that would include a parking area, accessible pathways, accessible restrooms, and interpretative/informative signage. The project is a cooperative effort between the Forest Service and the Arizona Department of Transportation. The project was proposed to address two areas of concern identified by the Coronado Ranger District. The first concern is that there are no restroom facilities on SR 366 in non-fee areas for the approximately 16 miles between Wet Canyon and Cunningham Canyon. The second concern is that the current use of the existing primitive area results in vehicle safety concerns along Swift Trail.

Under Alternatives 1, 2, and 3, the proposed project would be constructed in an already disturbed area consisting of a 100-foot, two-track dirt road with two small spurs and a concrete fire ring. The BAE describes the site as having moderate to low recreation use throughout the year. This site encompasses approximately 0.50 acres. Vegetation in the area is characterized in the BAE as second growth, pine-oak forest dominated by ponderosa pine. The slope is estimated to be less than 15 percent. The proposed project site under these alternatives is located immediately adjacent to SR 366. The average stand basal area for the proposed project site is 158 square feet per acre, with Gambel oak comprising almost 10 percent of the total basal area. The proposed project would occur in portions of the Hagens Point Protected Activity Center (#0504A015). The Hagens Point PAC encompasses approximately 643.04 acres. The BAE notes that trees larger than nine inches (") in diameter at breast height (dbh) would be

removed in the PAC, and that approximately one acre of "capable" habitat in the PAC would be affected.

Alternative 1 would involve construction of a parking area with parallel parking, a bathroom, and a concrete pathway to the lookout immediately adjacent to SR 366. Construction activities would include backfilling to raise the level of the project area to the existing level of SR 366, removal of 35 ponderosa pine trees with an average size of 16.6" dbh and 16 Gambel oak trees with an average size of 6.77" dbh. All trees removed would be less than 24" dbh.

Alternative 2 would involve construction of a parking area with pull-in parking, a bathroom, and a concrete pathway to the lookout directly adjacent to SR 366. As with Alternative 1, Alternative 2 would require backfilling to raise the proposed project area to the same level as the existing highway. Construction would result in the removal of 15 ponderosa pine trees averaging 17.7" dbh and 10 Gambel oak trees averaging 6.94" dbh in size. One additional ponderosa pine 28.8" dbh would also need to be removed.

Alternative 3 would involve construction of a parking area with pull-in parking, a bathroom, and a concrete pathway to the lookout. It would additionally create a turnoff and cul-de-sac. As proposed under Alternative 3, the project would require removal of 19 ponderosa pine trees averaging 16.6" dbh and 10 Gambel oak trees averaging 6.94" dbh in size. Two additional pine trees measuring 28.3" and 23.5" dbh would also need to be removed.

The BAE indicates that, for both Alternatives 1 and 2, the proposed project will redistribute the existing disturbed area adjacent to SR 366, and that noise disturbance from construction would be minimal as the site is currently affected by noise from recreational users and vehicular noise on the highway. The BAE notes that the Forest Service anticipates an increase in recreational activity, an increase in disturbance, and habitat modification. With respect to increased recreational activity, the BAE clarifies that the Forest Service would anticipate an increase in day-use visitation and recreation to the site, but would eliminate overnight use at the site. The Forest Service believes that recreation would be focused on developed paths and may therefore increase disturbance to the surrounding areas, but indicates that disturbance beyond construction would be minimal and therefore should not affect the owl. Alternative 3, rather than redistributing an existing disturbed area, would expand an existing disturbed area near Swift Trail.

Alternative 4 would be constructed at an existing trailhead consisting of a paved parking area immediately adjacent to SR 366. The BAE indicates that this area currently receives moderate to low recreational use throughout the year, and encompasses approximately 0.50 acres. Vegetation in the area is described as second-growth pine-oak forest which has experienced a "significant" round headed bark beetle kill. The slope in this area is estimated at less than 10 percent. Alternative 4 would affect approximately 0.50 acres of the Pitchfork Canyon PAC (0504A022).

Alternative 4 would involve construction of a bathroom, an elevated lookout, and a concrete pathway. While a paved parking area already exists, the proposed project would require a pad for the bathroom and the lookout. Twenty-two trees, primarily ponderosa pine, less than nine inches dbh would be removed, as well as three trees measuring 11.3", 13.8", and 10.1" dbh. The Forest Service believes that construction associated with the development of this alternative would be minimal because the site is currently impacted by recreational users and vehicular noise from the highway. As with Alternatives 1, 2, and 3, the Forest Service anticipates an increase in recreational activity, an increase in disturbance, and habitat modification. The increase in recreation would be associated with day-use visitation as overnight use would be eliminated. The Forest Service believes that disturbance would be limited to construction, and that habitat modification would be limited to construction as well.

#### STATUS OF THE SPECIES (Rangewide and Recovery Unit)

The Mexican spotted owl was proposed for listing on November 4, 1995 (56 CFR 56344) and was listed as threatened on March 16, 1993 (58 FR 14248). The Mexican spotted owl was originally described from a specimen collected at Mount Tancitaro, Michoacan, Mexico, and named *Syrnium occidentale lucidum*. The spotted owl was later assigned to the genus *Strix*. Specific and subspecific names were changed to conform to taxonomic standards and the subspecies became *S. o. lucida*. The American Ornithologists' Union currently recognizes three spotted owl subspecies, including the California (*S. o. occidentalis*), Mexican (*S. o. lucida*), and Northern (*S. o. caurina*). The Mexican spotted owl is mottled in appearance with irregular white and brown spots on its abdomen, back, and head. The spots of the Mexican spotted owl are larger and more numerous than in the other two subspecies giving it a lighter appearance. Several thin white bands mark an otherwise brown tail. Unlike most owls, spotted owls have dark eyes.

The Mexican spotted owl is distinguished from the California and Northern subspecies chiefly by geographic distribution and plumage. The Mexican spotted owl has the largest geographic range of the three subspecies. The range extends from the southern Rocky Mountains in Colorado and the Colorado Plateau in southern Utah southward through Arizona and New Mexico and, discontinuously through the Sierra Madre Occidental and Oriental to the mountains at the southern end of the Mexican Plateau.

Using starch-gel electrophoresis to examine genetic variability among the three subspecies of spotted owls, Barrowclough and Gutierrez (1990) found the Mexican spotted owl to be distinguishable from the other two subspecies by a significant variation, which suggests prolonged geographic isolation of the Mexican subspecies and indicates that the Mexican spotted owl may represent a species distinct from the California and Northern spotted owls.

The current known range of the spotted owl extends north from Aguascalientes, Mexico through the mountains of Arizona, New Mexico, and western Texas, to the canyons of southern Utah and southwestern Colorado, and the Front Range of central Colorado. Although this range covers a broad area of the southwestern United States and Mexico, much remains unknown

about the species' distribution within this range. This is especially true in Mexico where much of the owl's range has not been surveyed. Information gaps also appear for the species' distribution within the United States. It is apparent that the owl occupies a fragmented distribution throughout its United States range corresponding to the availability of forested mountains and canyons, and in some cases, rocky canyon lands.

The primary administrator of lands supporting owls in the United States is the Forest Service. According to the Recovery Plan, 91 percent of owls known to exist in the United States between 1990 and 1993 occur on land administered by the Forest Service (U.S. Fish and Wildlife Service 1995). The majority of known owls have been found within Region 3 of the Forest Service, which includes 11 National Forests in New Mexico and Arizona. Forest Service Regions 2 and 4, including two national forests in Colorado and three in Utah, support fewer owls.

The range of the Mexican spotted owl in the United States has been divided into six recovery units (RUs) as discussed in part II.B. of the Recovery Plan for the Mexican Spotted Owl (Recovery Plan) (U.S. Fish and Wildlife Service 1995). An additional five RUs were designated in Mexico. While the Recovery Plan provides distribution, abundance, and density estimates by RU, a reliable estimate of the numbers of owls throughout its entire range is not currently available due to the availability of only limited information. Owl surveys conducted through 1990 through 1993 indicate that the species persists in most locations reported prior to 1989, with the exception of riparian habitats in the lowlands of Arizona and New Mexico, and all previously occupied areas in the southern states of Mexico. Increased survey efforts have resulted in additional sightings for all recovery units.

Fletcher (1990) calculated that 2,074 owls existed in Arizona and New Mexico in 1990 using information gathered by Region 3 of the Forest Service. Fletcher's calculations were modified by McDonald *et al.* (1991), who estimated that there were a total of 2,160 owls in the United States. However, these numbers are not reliable estimates of current population size for a variety of statistical reasons. While the number of owls throughout its range is currently not available, the Recovery Plan reports an estimate of owl sites based on 1990 - 1993 data. An owl "site" is defined as a visual sighting of at least one adult owl or a minimum of two auditory detections in the same vicinity in the same year. Surveys from 1990 through 1993 indicate one or more owls have been observed at a minimum of 758 sites in the United States and 19 sites in Mexico. The greatest concentration of known owl sites in the United States occurs in the Upper Gila Mountain (55.9 percent), followed by the Basin and Range-East (16.0 percent), Basin and Range-West (13.6 percent), Colorado Plateau (8.2 percent), Southern Rocky Mountain-New Mexico (4.5 percent) and southern Rocky Mountain-Colorado (1.8 percent) RUs. At best, total numbers in the United States range from 777 individuals assuming each known site was occupied by a single owl, to 1,554 individuals assuming each known site was occupied by a pair of owls.

Past, current, and future timber-harvest practices in the Region 3 of the Forest Service, in addition to catastrophic wildfire, were cited as the primary factors leading to listing of the spotted owl as a threatened species. Fletcher (1990) estimates that 420,000 hectares (1,037,000

acres) of habitat were converted from suitable (providing all requirements of the owl, e.g., nesting, roosting, and foraging) to capable (once suitable, but no longer so). Of this, about 78.7 percent, or 330,000 hectares (816,000 acres) was a result of human management activities, whereas the remainder was converted more or less naturally, primarily by wildfire. Other factors which have or may lead to the decline of this species include a lack of adequate regulatory mechanisms. In addition, the Recovery Plan notes that forest management has created ecotones favored by great horned owls, and there is, as a result, an increased likelihood of contact between spotted owls and great horned owls (a potential competitor and predator). Increases in scientific research, birding, educational field trips, and agency trips are also likely to occur. Finally, there is a potential for increasing malicious and accidental anthropogenic harm. Based on short-term population and radio-tracking studies, and longer-term monitoring studies, the probability of an adult Mexican spotted owl surviving from one year to the nest is 0.8 to 0.9. Juvenile survival is considerably lower at 0.06 to 0.29, although it is believed these estimates may be artificially low due to the high likelihood of permanent dispersal from the study area and the lag of several years before marked juveniles reappear as territory holders and are detected as survivors through recapture efforts (White *et al.* 1995). Little research has been conducted on the causes of mortality of the spotted owl, but predation by great horned owls, northern goshawks, red-tailed hawks, and golden eagles, starvation, and accidents or collisions may all be contributing factors.

Little is known about the reproductive output for the spotted owl. It varies both spatially and temporally (White *et al.* 1995), but the subspecies demonstrates an average annual rate of 1.001 young per pair. There is inadequate data at this time to estimate population trend. Little confidence in initial estimates has been expressed, and is due to its reliance on juvenile survival rates which are believed to be biased low, and due to the insufficient time period over which studies have been conducted.

#### ENVIRONMENTAL BASELINE (in the Action Area)

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

The Forest Service has formally consulted on 184 timber sales and other projects in Arizona and New Mexico since August 1993. These projects have resulted in the anticipated incidental take of 61 owls. In addition, the Bureau of Indian Affairs has consulted on one timber sale on the Navajo Reservation which resulted in an anticipated take of four owls, and a highway reconstruction project which resulted in the anticipated take of two owls. The Federal Highway Administration in Arizona has consulted on one highway construction project that resulted in an undetermined amount of incidental take. The take associated with this action will be determined following further consultation.

The Kitchen Overlook project falls within the Basin and Range-West RU, as described in the Recovery Plan. This RU includes most of southern Arizona and a small portion of southwestern New Mexico. Owl territories occur in both heavily forested terrain and in areas with hardwood and conifer stringers dominated by Madrean Evergreen woodland. The subpopulation occurs in widely distributed territory clusters of varying sizes. The Sky Island Division may represent an important demographic link between the Mogollon Province demes and those in the Sierra Madre Occidental. Demographic persistence and connectivity within the Division and between divisions may be hindered by the compounding factors of naturally disjunct habitat and long dispersal distances.

The risk of habitat loss due to catastrophic wildfire is moderately high. In the past four years, the Noon, Arcadia, Clark Peak and Lone Fires have resulted in the loss of MSO habitat within this RU. Although the Coronado National Forest does not have an active timber program, localized projects such as road construction, mining, and other construction may adversely affect individual PACs established for known owl sites and restricted habitat, as defined by the Recovery Plan.

Within the Basin and Range-West RU, spotted owls were located in rocky canyons or in several forest types at elevations ranging from 1,125 to 2,930 meters (3,690 to 9,610 feet) of the Atascosa-Pajarito, Santa Rita, Santa Catalina, Patagonia, Whetstone, Galiuro, Huachuca, Chiricahua, Pinaleno, Superstition, Sierra Ancha, Mazatzal, and Bradshaw Mountains, Arizona. Below 1,300 meters (4,264 feet), spotted owls were found in steep canyons containing cliffs and stands of live oak, Mexican pine, and broadleaved riparian vegetation (Ganey and Balda 1989). Above 1,800 meters (5,904 feet) spotted owls were found in mixed conifer and pine-oak forests. Mid-elevation observations included sites with Arizona cypress and the other forest types previously mentioned (U.S. Fish and Wildlife Service 1995).

Currently, there are 37 Mexican spotted owl PACs designated in the Pinaleno Mountains where the proposed project would occur. No nest sites have been determined for any of the PACs. The PACs essentially ring the mountain range in the mixed conifer and transition zones.

## EFFECTS OF THE ACTION

The Recovery Plan recommends protection of all spotted owl sites designated from 1989 through the life of the Recovery Plan. These PACs should be identified around the "activity center," which is defined as the nest site/roost grove commonly used during the breeding season if a verified nest site can be identified, or the best nest/roost habitat if both nesting and roosting information is lacking. An owl site is identified as a visual sighting of at least one adult spotted owl or a minimum of two auditory detections in the same vicinity in the same year (U.S. Fish and Wildlife Service 1995). The Hagens Point and Pitchfork Canyon PACs are present in the proposed action area. These PACs were initially developed as management territories following surveys conducted for spotted owls in 1990 and 1991, and were later converted to PACs. The BAE notes that informal monitoring occurred in 1992, 1994, and 1996 for the Hagens Point PAC. Surveys were completed in 1992 for the Pitchfork Canyon PAC.



Alternatives 1 and 2

Surveys were conducted for the Hagens Point PAC in 1992 and resulted in the detection of one pair of owls within 0.10 miles of the project area. Subsequent surveys completed in 1994 and 1996 resulted in observations of the owls within one mile of the proposed project area. The nest site for this PAC is not known. The proposed project would affect pine-oak forest dominated by ponderosa pine. The Forest Service anticipates that the action, as proposed under Alternatives 1 and 2, would affect approximately one acre of capable habitat by effectively widening the road surface area to accommodate parking spaces, a restroom, and walkway. The primary difference between Alternatives 1 and 2 is that, while both would place all features along the existing road, Alternative 2 extends further into the PAC but for a shorter distance along SR 366, while Alternative 1 would not extend as far into the PAC, but would occur over a longer distance along SR 366. Engineering drawings were provided in the BAE showing the exact configurations of these areas, and are incorporated here-by reference. Both alternatives would involve the removal of 35 ponderosa pine and oak trees as indicated in the following table which appeared in the BAE.

	<9"	9"-15"	15"-21"	>21"
Alt. 1 Stems %	24 43%	10 18%	14 25%	7 13%
Alt. 2 Stems %	21 60%	4 12%	7 20%	3 8.5%

Alternatives 1 and 2, as described in the BAE, are not in compliance with the Recovery Plan in that they would result in the removal of trees larger than 9" dbh from a PAC and would result in the construction of roads within or immediately adjacent to a PAC. The Recovery Plan indicates that large trees should be left in place as they are an essential component of spotted owl habitat, and are used for nesting, roosting, foraging, and dispersal. The Recovery Plan discourages the practice of creating roads or trails in PACs as they can result in the fragmentation of nest/roost habitat used by spotted owls.

The Forest Service determined that completion of this project under Alternative 1 and 2 may affect, but is not likely to adversely affect the Mexican spotted owl. However, the BAE additionally notes that the Forest Service has determined that implementation of Alternatives 1 and 2 "will disturb current habitat for the Mexican spotted owl." The Service does not concur with a may affect, not likely to adversely affect determination for the following reasons:

1. While the BAE indicates that the proposed project area "may be a foraging area for spotted owls but is not a nesting area," it should be noted that the nest site for these owls is not known. While it is unlikely that the nest site is located in the trees to be removed

as part of this action, it is possible that the nest site is located within 0.25 miles of the proposed action area, and would be subject to noise disturbance during the breeding season. If implemented, Alternative 1 would result in the removal of trees within the PAC and could subsequently expose key nest/roost sites within the PAC to greater disturbance from highway traffic and recreation use and result in disturbance to foraging habitat.

2. Placement of fill material will be required to raise the project site to the elevation of the existing roadway. This will increase noise disturbance in the area, and render portions of the PAC unsuitable for foraging due to temporary displacement of small rodents and other animals that potentially contribute to the prey base for the owls using this PAC. As noted under the Consultation History, while the Forest Service will make every attempt to construct the proposed project outside of the breeding season for spotted owls, the proposed project may be constructed during the breeding season, depending on constraints on the use of funds acquired for this project.
3. While overnight camping would be eliminated, there would be an increase in day use in the area.

Due to these factors, the Service believes that the project, as proposed under Alternative 1, would result in adverse effects to spotted owls within the Hagens Point PAC.

#### Alternative 3

If implemented under Alternative 3, the proposed project would occur in the same area as it would under Alternatives 1 and 2. The primary difference with respect to this alternative is that it would also involve the removal of two trees larger than 24" dbh, and would effectively divide habitat in the Hagens Point PAC by extending in a curved line into the PAC and isolating a pocket of habitat within the PAC between the parking lot, restroom, and overlook facilities and SR 366. The engineering drawing provided for Alternative 3 in the BAE is incorporated here by reference.

The Forest Service has determined that implementation of Alternative 3 may adversely affect the spotted owl, and the Service is in agreement with this determination for the reasons stated under Alternatives 1 and 2. Additionally, overall habitat disturbance associated with this project would increase due to the configuration of the proposed facilities.

#### Alternative 4

As with the other three alternatives, the project as proposed under Alternative 4 would occur in a previously disturbed area. Alternative 4 would be located at an existing trail head. The proposed project, if implemented under Alternative 4, would affect approximately 0.5 acres of the Pitchfork Canyon PAC. The BAE notes that no owls have been observed in the immediate vicinity of the proposed project area since 1987, but that one observation in 1992 was made

within the territory, approximately two miles from the proposed project area. The BAE does not indicate that any surveys have been completed since 1992. Alternative 4 would involve the removal of 22 trees less than 9" dbh and three trees measuring 11.3", 13.8", and 10.1". The BAE notes that the majority of the 22 trees to be removed are ponderosa pine snags that resulted from bark beetle infestation. Implementation of Alternative 4 would also require the placement of fill material and construction of a pad for the restroom. The Forest Service has determined that the proposed project may affect, but is not likely to adversely affect the spotted owl.

The Service does not concur with the determination of may affect, not likely to adversely affect for the following reasons:

1. Placement of fill material to raise the project site to the elevation of the existing roadway would render portions of the PAC unsuitable for foraging activities due to the temporary displacement small rodents and other animals that potentially contribute to the prey base for the owls using this PAC.
2. While overnight camping would be eliminated, there would be an increase in day use in the area.
3. Construction activities may take place during the breeding season and would result in increased noise disturbance. As noted previously, the Forest Service will make every attempt to construct the proposed facilities outside of the breeding season but can not guarantee that construction will take place outside of the breeding season due to funding constraints.

It should be noted that, during a telephone conversation between Forest Service and Service staff on May 28, 1997, it was indicated that Alternative 4 may be dropped from consideration due to complications with plan specifications and project goals.

## CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of ESA. The action area is completely contained within the Coronado National Forest. The Service knows of no State, local, or private actions that are reasonably certain to occur in the action area.

## CONCLUSION

After reviewing the current status of the spotted owl, the environmental baseline for the action area, the effects of the proposed construction and related activities associated with the Kitchen Overlook and the cumulative effects, it is the Service's biological opinion that the project as proposed is not likely to jeopardize the continued existence of the spotted owl. While the Forest

Service provided a determination of affect for each of the alternatives presented on critical habitat, consultation on critical habitat is not required at this time, since critical habitat for the Mexican spotted owl has been enjoined by New Mexico District Court (Coalition of Arizona-New Mexico Counties for Stable Economic Growth versus USFWS, No. 95-1285-M Civil (D.N.M., filed March 4, 1977)).

### INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of ESA, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or the applicant. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Forest Service has a continuing responsibility to regulate the activity covered by this incidental take statement. If the Forest Service (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

### AMOUNT OR EXTENT OF TAKE

The Service anticipates that one pair of spotted owls could be taken as a result of the proposed action. Because the consultation involves four alternatives, it is important to note that the Service anticipates take of two owls from whichever alternative is implemented. While the amount of habitat disturbed would be small, it would be within one of two Protected Activity Centers for the owl, and would potentially occur during the breeding season. The incidental take would be in the form of harassment. As defined by regulations at 50 CFR §17.3, harass means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. The Service believes that the proposed action, regardless of the alternative

chosen, would result in harassment by increasing noise disturbance during the breeding season, removing vegetation that would serve as a buffer from existing noise levels associated with the highway, and reducing prey base by placement of fill materials.

If, during the course of the action, the amount or extent of the incidental take anticipated is exceeded, the Forest Service must reinitiate consultation with the Service immediately to avoid violation of section 9. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined that the impact of the additional taking will cause an irreversible and adverse impact on the species, as required by 50 CFR 402.14(i). An explanation of the causes of the taking should be provided to the Service.

### EFFECT OF THE TAKE

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat. Regardless of the alternative selected, trees greater than 9" dbh would be removed in a PAC, the buffer provided by these trees from use of the trail or road would be removed, and portions of the habitat within a PAC would be at least temporarily eradicated due to placement of fill. The proximity of the project area to a nest/roost site is not known. The Forest Service has indicated that they may or may not be able to restrict construction activities outside of the breeding season. For these reasons, the Service believes that the following reasonable and prudent measure would minimize the affects of the project on the owl, but would not eliminate take.

### REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize take:

1. If possible, minimize effects of noise disturbance to Mexican spotted owls.

### TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of ESA, the Forest Service must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary. The following terms and condition is necessary to implement reasonable and prudent measure 1 above.

- 1.1 If possible, complete construction activities outside of the breeding season (March 1 to August 31) for the Mexican spotted owl.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action.

With implementation of these measures the Service believes that no more than one pair of spotted owls will be incidentally taken. If, during the course of the action, this minimized level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The Forest Service must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

Notice: While the incidental take statement provided in this consultation satisfies the requirements of the Endangered Species Act, as amended, it does not constitute an exemption from the prohibitions of take of listed migratory birds under the more restrictive provisions of the Migratory Bird Treaty Act.

### **CONSERVATION RECOMMENDATIONS**

Section 7(a)(1) of ESA directs Federal agencies to utilize their authorities to further the purposes of ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1. Select an alternative site for placement of the scenic overlook and restroom facilities that would occur outside of a PAC.
2. Enhance survey efforts to determine nest/roost sites used by Mexican spotted owls in known PACs to increase the Forest Service's ability to avoid adverse effects to the owl in future project planning.
3. Take an active role in developing a conservation strategy to avoid or minimize adverse effects of recreation and other projects to Protected Activity Centers on the Safford Ranger District in the future.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

### **REINITIATION - CLOSING STATEMENT**

This concludes formal consultation on the action(s) outlined in the request for formal consultation. Because this opinion reviews four alternatives that would affect one of two PACs depending on the alternative selected, the Service requests that the Forest Service notify the Service when an alternative has been chosen.

As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

The Service appreciates your consideration of threatened and endangered species in project development. For further information please contact Mary Richardson or Angie Brooks. Please refer to the consultation number 2-21-97-F-167 in future correspondence concerning this project.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sam F. Spiller".

Sam F. Spiller  
Field Supervisor

cc: Regional Director, Fish and Wildlife Director, Albuquerque, NM (GM:AZ)(AES)  
Field Supervisor, New Mexico Ecological Services Office, Albuquerque, NM  
(Attn: Sarah Rinkevich)

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